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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,316	12/03/1999	SHIEN-CHANG CHEN	49458	3580

21874 7590 07/13/2003

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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 07/11/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/454,316

Applicant(s)

CHEN ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,6,8-10,14-16 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,8-10,14-16 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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DETAILED ACTION

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 6, 8-10, 14-16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bartsch US 4,158,737.

Regarding claim 1, Bartsch '737 discloses a catalyst comprising palladium metal as the main catalyst (see column 1, lines 10-15) in the range of 0.5 to 2.0% weight (see column 5, line 41), tin and mixtures of tin with other metals in the range of 0.05 to 0.6% weight as promoter (see column 5, lines 47-55), in combination with an alkali or alkaline earth metal compound (see abstract and column 3, lines 64-68), on the outer surface of a porous carrier (see column 3, line 25), being used in the process for producing allyl acetate (see abstract).

Regarding claim 20, Sennewald '747 discloses impregnating the carrier with palladium and promoter metals in oxidative state (see column 4, lines 15-20), then reducing the metals from an oxidative state into metallic state (see column 4, lines 23-

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25), impregnating the metallic state metals-supporting carrier with a solution of alkali or alkaline earth metal compounds (see column 4, line 30, and column 6, lines 12-15), and then drying (see column 4, lines 30-31).

Regarding claim 4, Bartsch '737 discloses palladium (see column 5, line 29) in the range of 0.5 to 2.0% weight (see column 5, line 41).

Regarding claims 6 and 8, Bartsch '737 discloses tin and mixtures of tin with other metals in the range of 0.05 to 0.6% weight (see column 5, lines 47-55).

Regarding claims 9 and 10, Bartsch '737 discloses alkali or alkaline earth metal compound in the range of 0.5 to 10% weight (see column 5, line 45).

Regarding claim 14, Bartsch '737 discloses the alkali and alkaline earth metal carboxylates and the formates and acetates of sodium, potassium, and lithium (see column 5, lines 33-39).

Regarding claim 15, Bartsch '737 discloses potassium hydroxide, acetate, formate, and carboxylates (see column 5, lines 12-13 and 33-39).

Regarding claim 16, Bartsch '737 discloses alumina (see abstract).

***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartsch 4,158,737 as applied to claim 1 above, and further in view of Sennewald et al. 3,655,747.

Bartsch fails to disclose impregnating and reducing in solution with amines, aldehydes, or hydrazines.

Regarding claim 21, Sennewald '747 discloses hydrazine hydrate solution as reducing agent (see column 4, lines 23-24).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the impregnation and reduction method of Sennewald '747 with the catalyst of Bartsch '737 because Bartsch specifies the use of Sennewald's method to impregnate a noble metal catalyst to a carrier (see Bartsch '737, column 5, line 28).

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartsch '737 as applied to claim 20 above, and further in view of Kronig et al. 3,822,308.

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Bartsch fails to disclose carbon monoxide, hydrogen, or alkene as reducing agent.

Regarding claim 22, Kronig '308 discloses ethylene gas as reducing agent (see column 4, lines 29-31).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the ethylene in Kronig '308 with the catalyst and method in Bartsch because Bartsch specifies the use of Kronig's method for impregnating noble metal catalysts to carriers (see Bartsch '737, column 5, lines 28-29).

#### ***Response to Arguments***

6. Applicant's arguments filed 6/19/03 have been fully considered but they are not persuasive.

The rejection under 35 USC 112(1) has been withdrawn in view of Applicant's amendment.

It is argued that Applicant's note that claim 1 of the Bartsch patent particularly points out... **not** the catalyst composition. This is not persuasive because claim 1 of the Bartsch patent is not relied upon for the disclosure of the catalyst composition. Rather, the claimed subject matter is disclosed elsewhere (see above). Applicant appears to suggest that the claims are allowable because tin is disclosed among a "laundry list" of metals. It is noted that the instant claims

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could also be construed as including a "laundry list" of combinations with the language "consisting essentially of", which includes any ingredients that does not materially affect the basic and novel characteristics of the claimed invention. Applicant also appears to suggest that the instant claim is limited to only "three metals". This is not persuasive for the same reason. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a catalyst consisting of only "three metals") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that thus Bartsch did not disclose either the specifically claimed oxacylation catalysts having a mixture of palladium, gold and tin excluding other transition metals. This is not persuasive because Bartsch discloses the catalyst being used in the process for producing allyl acetate (see abstract).

It is argued that the disclosures of Sennewald and Kronig fail to overcome the limitations of the Bartsch disclosures. This is not persuasive because Sennewald is relied upon for impregnation and reduction and Kronig is relied upon for

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ethylene gas. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ  
July 8, 2003

  
**STANLEY S. SILVERMAN**  
**SUPERVISORY PATENT EXAMINER**  
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